

REMARKS

It is assumed that the Amendments filed 6/25/04, 4/25/05 and 11/20/2005 have not been entered. Accordingly, the forgoing Amendment should replace the 6/25/04, 4/25/05 and 11/20/2005 Amendments to ensure a proper listing of claims is current.

A. In the Office Communication (unnumbered paper) mailed on 31 January 2006, the Examiner held the reply filed on 11/28/2005 as not fully responsive to a prior Office action. The applicant respectfully traverses this holding for the following reason(s).

In this restriction requirement, the Examiner restricted (I) a semi flexible tubing of FIG. 3 from (II) a coiled tubing of FIG. 27. In addition, the Examiner insisted that Applicant elect exactly 1) what end fitting each end of the transfer line is connected to (PP, LE, standard HE, separation HE, etc) and to 2) also specify whether or not a manifold is present at each end and then to 3) specify exactly how many ports are in all manifolds present in the elected specie and then to 4) specify exactly what end fittings are in each port of each manifold attached to the transfer line.

Applicant provisionally elected, with traverse, (I) the semi flexible tubing of FIG. 3 having a percussion primer end fitting (FIG. 4) at a first end of the semi flexible tubing and a standard HE end fitting (FIG. 20) at a second end of the semi flexible end fitting, where the first end of the PP end fitting being absent any transfer manifold and the second end with the standard HE end fitting being lodged in a three port manifold, where the other two ports have a standard LE end fitting and a

standard HE end fitting respectively.

In response to the original restriction, Applicant respectfully submitted that claims 1-5, 8-10, 23-26, 29-30 and 33-35 both 1) read on and 2) were generic to Applicant's elected specie.

The Examiner disagreed with the Applicant's claim listing and took it upon himself to determine that only original claims 33-35 read on the elected species. See page 4 of the 3/30/04 Office action.

Accordingly, claims 1-32 were canceled and claims 36-65 were newly added.

Therefore the Applicant's hereby identifies claims 33- 49, 52, 53, 54-59 and 62-65 as reading on the elected invention. Of the foregoing, claims 47-49, 58 and 59 are specific to the PP end fittings; and claims 52, 53, 62 and 63 are specific to the HE end fittings. Additionally, of the foregoing, at least independent claims 33-46, 54-57 , 64 and 65 are generic to the elected invention.

MPEP 806.04(d) Definition of a Generic Claim

In an application presenting three species illustrated, for example, in Figures 1, 2, and 3, respectively, a generic claim should read on each of these views; but the fact that a claim does so read is not conclusive that it is generic. It may define only an element or subcombination common to the several species.

In general, a generic claim should require no material element additional to those required by the species claims, and each of the species claims must require all the limitations of the generic

claim.

Once a generic claim is allowable, all of the claims drawn to species in addition to the elected species which require all the limitations of the generic claim will ordinarily be allowable over the prior art in view of the allowability of the generic claim, since the additional species will depend thereon or otherwise require all of the limitations thereof. When all or some of the claims directed to one of the species in addition to the elected species do not require all the limitations of the generic claim.

Applicant reminds the Examiner that the claims are open ended claims and each claim need not include every feature of the elected invention. Open ended claims can be as broad as the art allows.

The Examiner's apparent disagreement with the Applicant's listing is not grounds for holding this response "not fully responsive". The Examiner is free to provide a rejection under 35 U.S.C §112, first paragraph of any claims he deems not to be enabled by the specification as reading on the elected invention. The Examiner should clearly explain why such rejected claims are not enabled.

Note here that it appears that the Examiner was basing his holding on the phrases "first loaded end fitting" and "second loaded end fitting". If such is the case, it is not clear why the Examiner chose to examine claims 33-35 on the merits. However, the foregoing Amendment

removes the term "loaded" from these phrases.

B. Claims 33-35 were rejected under 35 U.S.C. §112, first and second paragraphs based upon the use of the term "rapid deflagration cord." The applicant respectfully traverses this rejection for the following reason(s).

The Examiner alleges that the metes and bound of the invention are undefined because the claims are apparently vague, indefinite and incomplete as to what all materials or compositions are meant by and encompassed by the term "rapid deflagration cord."

The term "rapid deflagration cord" is used in, for example, twenty (20) U.S. patents, some of which use the term in the claims without defining what all materials or compositions are meant by and encompassed by the term "rapid deflagration cord." The following is a definition provided by MSI (McCormick Selph, Inc.: see <http://www.mcselph.com/linearexplosives.html> (attached)):

Rapid Deflagration Cord (RDC) is a very unique product manufactured by MSI. This material can be supplied in a wide variety of configurations and metal sheaths to meet specific customer requirements. RDC is non-detonating and burns at a rate of approximately 1000 ft/sec. Functional throughout the temperature range of -200 °° to +370 °° C, RDC has been successfully subjected to high temperature storage of 5000 hours at +205 °° C. RDC can be incorporated into a variety of applications such as satellite rocket motor ignition, propellant activation systems and in distribution systems for dispensing tactical munitions applications.

Accordingly, "rapid deflagration cord" is a generic term and is well known in the art. There is no requirement that patent application, or claims, set forth all materials or compositions are meant by and encompassed by the generic term "rapid deflagration cord," especially since one maker of such a cord defines the term as having a wide variety of configurations.

Additionally, there is no requirement under §112, paragraph 2, to make a distinction between rapid deflagrating materials and mild detonating materials, since the claims do not call for mild detonating materials. Note that U.S. Patent No. 6,467,415 (of record) claims for "metal-sheathed linear explosive being selected from any of a linear shaped charge, a mild detonating cord and a rapid deflagration cord." If there was no difference between a mild detonating cord and a rapid deflagration cord, the claim would be invalid, however a patented claim is considered valid by the PTO. Note also, the following is a definition is also provided by MSI (McCormick Selph, Inc.):

Mild Detonating Cord (MDC) is metal clad linear explosive usually drawn or extruded in a round configuration. It can be rolled into an elliptical or flat ribbon shape based on customer requirements. Typically, grain sizes vary from 2.5 gr/ft to 100 gr/ft but can be adjusted to fit customers specification requirements. MDC can be supplied in aluminum, tin, lead or silver sheath.

Accordingly, it is considered to be known in the art that rapid deflagration cord and mild detonating cord are different products, and as such, the present application and claims need not define the difference.

Further, the invention is for an energy transfer line system, comprising a rapid deflagration cord (RDC). The invention is **not** a rapid deflagration cord (RDC). Accordingly, any RDC on the market can be utilized by the claimed energy transfer line system.

Accordingly, the rejections are deemed to be in error and should be withdrawn.

The Examiner also refers us to MPEP 2173.05(u) which refers to the use of a "trademark or

trade name" as a claim limitation. First, note that there is no trademark for a rapid deflagration cord (RDC), and the Examiner has not provided any showing that such a trademark exists.

Accordingly, since the term a rapid deflagration cord (RDC) is not a trademark, and is accepted by the PTO as evidenced by the 20 patents containing the term as a generic term in the art, it is not a trade name. It should also be noted that the term is set forth in the claims of at least four (4) U.S. patents (6,467,415; 6,435,095; 5,518,268; 5,406,889) two of which are assigned to MSI.

Accordingly, since the PTO has already demonstrated acceptance of the term rapid deflagration cord in valid claims, and the term is not trademarked, then the rejections under §112, paragraphs one and two should be withdrawn.

Also, claims 33-35 have been amended to change the term "rapid deflagration cord" to --rapid deflagrating cord--. Support for the tem --rapid deflagrating cord-- is found in paragraph [0002]. Additionally, claim 33 (original) mistakenly claimed a first loaded end fitting disposed at said first end of said transfer line, a first ferrule connecting said first end of said transfer line to said first loaded end fitting, and a closure cup having a rim welded to said first ferrule. As can be seen from Figs. 4, 10 and 20 the loaded end fittings include a ferrule and a closure cup (Figs 10 and 20). Accordingly, it is erroneous to claim the ferrule and the closure cup as components separate from the loaded end fitting. This has been corrected by the amendment to claim 34.

C. Claim33-35 were rejected under 35 U.S.C. §103(a), as rendered obvious and

unpatentable, over Alchron et al. (*hereafter: Alchron*) in view of Hadden or Smith. The Applicant respectfully traverses this rejection for the following reason(s).

Alchron fails to disclose or teach a *rapid deflagrating cord*. Although Alchron teaches using a deflagrating cord, it is well known in the art that not all deflagrating cords are the same. Note that Hadden discusses the use of a **low velocity** deflagrating material which is known to differ from a **rapid** deflagrating cord as a **rapid** deflagrating cord is known to burn faster than a general deflagrating cord.

Note that there is no teaching in Hadden that the end fittings described therein are appropriate for use with rapid deflagrating cords.

Note also that Smith describes end fittings for detonating cords. There is no teaching in Smith that the end fittings are appropriate for use with any deflagrating cords, particularly rapid deflagrating cords.

Accordingly, one of ordinary skill in the art would have been motivated to use either Hadden's or Smith's end fittings in Alchron only if the cord used by Alchron is a low velocity deflagrating cord or a detonating cord, respectively.

If one of ordinary skill in the art were motivated to use a rapid deflagrating cord in Alchron, since rapid deflagrating cords are known in the art, there is no teaching in either of Hadden or Smith to motivate one of ordinary skill in the art to utilize the end fittings of either Hadden or Smith with a rapid deflagrating cord. There is only a teaching in Hadden of use with a low velocity deflagrating cord, and in Smith of use with a detonating cord.

Accordingly, the rejection of claims 33-35 is deemed to be in error and should be withdrawn.

Despite the Applicant's attempt to have claims 1-5, 8-10, 23-26, 29-30 and 33-35 examined on the merits with respect to the Applicant's elected specie, the Examiner has only examined claims 33-35.

As noted by the Applicant, claim 33 is generic to all the disclosed species. Accordingly, when it is determined that a generic claim is patentable over the art, then the restriction/election requirement is to be withdrawn (MPEP 804.01(C)) and all the claims are to be examined on the merits. 37 CFR 1.141 states: Two or more independent and distinct inventions may not be claimed in one national application, **except that more than one species of an invention**, not to exceed a reasonable number, may be specifically claimed in different claims in one national application, provided that application also includes an allowable claim generic to all the claimed species and all the claims to species in excess of one are written in dependent form (Section 1.75) or otherwise include all the limitations of the generic claim.

The Examiner has provided no argument indicating that claim 33 is not generic. Should the Examiner now attempt to argue otherwise, it is requested that the Examiner identify the species to which claim 33 is not generic. Additionally, new claim 54 is generic. The subject matter of amended claim 33 and new claim 54 is not taught by the prior art.

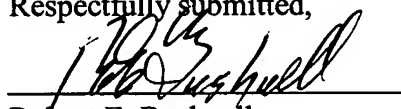
It should be noted here that the basis of the Applicant's invention is the transfer line 300 as described with respect to Figs. 1-3. The loaded end fittings (Fig. 4, Fig. 10 and Fig. 20) are

additional components which are combined with the transfer line. Claims 33-65 set forth the invention as outlined above.

The examiner is respectfully requested to reconsider the application, withdraw the objections and/or rejections and pass the application to issue in view of the above amendments and/or remarks.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

Respectfully submitted,



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